

Title (en)
ENERGY SUPPLY SYSTEM OF A RAIL VEHICLE

Title (de)
ENERGIEVERSORGUNGSSYSTEM EINES SCHIENENFAHRZEUGS

Title (fr)
SYSTÈME D'ALIMENTATION EN ÉNERGIE D'UN VÉHICULE SUR RAIL

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Application
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Abstract (en)
[origin: WO2018059826A1] The invention relates to a rail vehicle (1) comprising an energy supply system for supplying electric loads. The rail vehicle (1) has railway carriages (2), and the rail vehicle (1) has a train busbar (3). The aim of the invention is to improve the energy supply system of the rail vehicle (1). This is achieved in that the rail vehicle (1) has a DC supply busbar (4) and a 3AC busbar (5), and the DC supply busbar (4) and the 3AC busbar (5) extend over at least two of the railway carriages (2). The DC supply busbar (4) is connected to the train busbar (3) via a central energy supply unit (11), and the central energy supply unit (11) is arranged in a first railway carriage (21) of the at least two railway carriages (2) over which the DC supply busbar (4) and the 3AC busbar (5) extend. A respective decentralized energy supply unit (12) is arranged in at least one second railway carriage (22) of the at least two railway carriages (2), and the decentralized energy supply unit (12) is connected to the DC supply busbar (4) and the 3AC busbar (5). The invention additionally relates to a method for operating the energy supply system of such a rail vehicle (1).

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